S/N NEW FILING PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	CARLSON	Examiner:	UNKNOWN
Serial No.:	NEW FILING	Group Art Unit:	1645
Filed:	FILED HEREWITH	Docket No.:	14095.1USC6
Confirmation No.:	UNKNOWN	Customer No.:	23552
Title:	ARTIFICIAL RECEPTORS INCLUDING AMINO ACID DERIVED BUILDING BLOCKS AND METHODS OF MAKING AND USING THEM (AMENDED)		

CERTIFICATE UNDER 37 CFR 1.10:
"Express Mail" mailing label number: EV 321726600 US
Date of Deposit: December 2, 2003

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner for Patents, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.

By: Sheryl A. Boerboom
Name: Sheryl A. Boerboom

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted within three months of the filing date of the above-identified application, which is not an application under 37 C.F.R. § 1.53(d). Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(d), a copy of each document or other information listed on the enclosed Form 1449 is not provided because it was previously cited by or submitted to the U.S. Patent and Trademark Office in parent application, U.S. Serial No. 10/244,727 filed on September 16, 2002.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: Dec 2, 2003

Mark T. Skoog

Mark T. Skoog
Reg. No. 40,178
MTS:sab

23552
PATENT TRADEMARK OFFICE

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 14095.1USC6	Application Number: NEW FILING
	Applicant: CARLSON	
	Filing Date: FILED HEREWITH	Group Art Unit: 1645

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,324,633	06/28/1994	Fodor et al.			
	5,475,100	12/12/1995	Hashino et al.			
	5,770,380	06/23/1998	Hamilton et al.			
	5,804,563	09/08/1998	Still et al.			
	5,942,393	08/24/1999	Nobori et al.			
	5,998,594	12/07/1999	Goodman et al.			
	6,061,636	05/09/2000	Horlbeck			
	6,096,551	08/01/2000	Barbas et al.			
	6,111,123	08/29/2000	Coucouvanis et al.			
	6,153,743	11/28/2000	Hubbell et al.			
	6,198,912 B1	01/02/2001	Chen			
	6,261,776 B1	07/17/2001	Pirrung et al.			
	6,287,765 B1	09/11/2001	Cubicciotti			
	6,316,616 B1	11/13/2001	Jacobsen et al.			
	6,331,441 B1	12/18/2001	Balch et al.			
	6,346,413 B1	02/12/2002	Fodor et al.			
	6,419,881 B1	07/16/2002	Weinberg et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
		"Introducing Human Cancer OligoArray™", *Sigma Genosys*, 1 page (2002)
		"Various Search Reports," 109 pages (2001-2002)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 14095.1USC6	Application Number: NEW FILING
	Applicant: CARLSON	
	Filing Date: FILED HEREWITH	Group Art Unit: 1645

		Alluri, P. et al., "Isolation of Protein Ligands from Large Peptoid Libraries", Center for Biomedical Inventions, Department of Internal Medicine and Molecular Biology, University of Texas Southwestern Medical Center
		Bachhawat-Sikder, K. et al., "Mixed-Element Capture Agents: A simple Strategy for the Construction of Synthetic, High-Affinity Protein Capture Ligands", J. Am. Chem. Soc., 125:9550-9551 (2003)
		Blackwell, H. et al., "Exploiting Site - Site Interactions on Solid Support to Generate Dimeric Molecules," *Organic Letters*, Vol. 3, No. 8, pp. 1185-1188 (2001)
		Bluhm, L. et al., "An Alternative Procedure to Screen Mixture Combinatorial Libraries for Selectors for Chiral Chromatography," *Analytical Chemistry*, Vol. 72, No. 21, pp. 5201-5205 (November 1, 2000)
		Borchardt, A. et al., "Synthetic Receptor Binding Elucidated with an Encoded Combinatorial Library," *J. Am. Chem. Soc.*, Vol. 116, No. 1, pp. 373-374 (1994)
		Boyce, R. et al., "Peptidosteroidal Receptors for Opioid Peptides, Sequence-Selective Binding Using a Synthetic Receptor Library," *J. Am. Chem. Soc.*, Vol. 116, No. 17, pp. 7955-7956 (1994)
		Boyce, R. et al., "Peptidosteroidal Receptors for Opioid Peptides, Sequence-Selective Binding Using a Synthetic Receptor Library", J. Am. Chem. Soc., 116:7955-7956 (1994)
		Brennan, M., "Protein Interactions: Putting on the Brakes. Antibody Mimics that Bind to Protein Surface Block Protein-Protein Interactions," *C & EN*, pp. 65-66, 69 (January 22, 2001)
		Breslow, R. et al., "Sequence Selective Binding of Peptides by Artificial Receptors in Aqueous Solution," *J. Am. Chem. Soc.*, Vol. 120, No. 14, pp. 3536-3537 (1998)
		Bunin, B. et al., "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives," *J. Am. Chem. Soc.*, Vol. 114, pp. 10997-10998 (1992)
		CARA presented September 10, 2003
		Cha, X. et al., "Molecular Recognition of Aqueous Dipeptides by Noncovalently Aligned Oligoglycine Units at the Air/Water Interface," *J. Am. Chem. Soc.*, Vol. 117, No. 48, pp. 11833-11838 (1995)
		Chambers, R. et al., "High-level generation of polyclonal antibodies by genetic immunization", Nature Biotechnology, 21(9):1088-1092 (September 2003)
		Cheng, Y. et al., "Sequence-Selective Peptide Binding with a Peptido-A,B-trans-steroidal Receptor Selected from an Encoded Combinatorial Receptor Library," *J. Am. Chem. Soc.*, Vol. 118, No. 7, pp. 1813-1814 (1996)
		Cheng, Y. et al., "Sequence-Selective Peptide Binding with a Peptido-A, B-trans-steroidal Receptor Selected from an Encoded Combinatorial Receptor Library", J. Am. Chem. Soc., 118:1813-1814 (1996)
		Cousins, G. et al., "Molecular Evolution: Dynamic Combinatorial Libraries, Autocatalytic Networks and the Quest for Molecular Function," *Current Opinion in Chemical Biology*, Vol. 4, pp. 270-279 (2000)
		Deng, Q. et al., "Retention and Separation of Adenosine and Analogues by Affinity Chromatography with an Aptamer Stationary Phaase," *Anal. Chem.*, Vol. 73, No. 22, pp. 5415-5421 (November 15, 2001)
		Fiammengo, R. et al., "Synthetic Self-Assembled Models with Biomimetic Functions," *Current Opinion in Chemical Biology*, Vol. 5, pp. 660-673 (2001)
		Freemantle, M, "Amplification of the Fittest. Dynamic Combinatorial Library Strategy Leads to Discovery and Synthesis of New Compounds," *C & EN*, pp. 31-33 (September 2, 2002)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 14095.1USC6	Application Number: NEW FILING
	Applicant: CARLSON	
	Filing Date: FILED HEREWITH	Group Art Unit: 1645

		Hamilton, A. et al., "Model Systems Artificial Models of Protein Function," *Current Opinion in Chemical Biology*, Vol. 5, pp. 623-625 (2001)
		Hamuro, Y. et al., "A Calixarene with Four Peptide Loops: An Antibody Mimic for Recognition of Protein Surfaces," *Angew. Chem. Int. Ed. Engl.*, Vol. 36, No. 23, pp. 2680-2683 (1997)
		Hamuro, Y. et al., "Functionalized Oligoanthranilamides: Modular and Conformationally Controlled Scaffolds," *Bioorganic & Medicinal Chemistry*, Vol. 9, pp. 2355-2363 (2001)
		Haupt, K. et al., "Molecularly Imprinted Polymers and Their Use in Biomimetic Sensors," *Chem. Rev.*, Vol. 100, No. 7, pp. 2495-2504 (2000)
		Hergenrother, P. et al., "Small-Molecule Microarrays: Covalent Attachment and Screening of Alcohol-Containing Small Molecules on Glass Slides," *J. Am. Chem. Soc.*, Vol. 122, No. 32, pp. 7849-7850 (2000)
		Hubbard, R. et al., "Highly Substituted *ter*-Cyclopentanes as Receptors for Lipid A," *J. Am. Chem. Soc.*, Vol. 123, No. 24, pp. 5810-5811 (2001)
		Huc, I. et al., "Virtual Combinatorial Libraries: Dynamic Generation of Molecular and Supramolecular Diversity by Self-Assembly," *Proc. Natl. Acad. Sci. USA*, Vol. 94, pp. 2106-2110 (March 1997)
		Jain, R. et al., "Protein Surface Recognition by Synthetic Receptors Based on a Tetraphenylporphyrin Scaffold," *Organic Letters*, Vol. 2, No. 12, pp. 1721-1723 (2000)
		Kasher, R. et al., "Design and Synthesis of Peptides that Bind α-Bungarotoxin with High Affinity," *Chemistry & Biology*, Vol. 8, pp. 147-155 (2001)
		Kick, E. et al., "Structure-Based Design and Combinatorial Chemistry Yield Low Nanomolar Inhibitors of Cathepsin D," *Chemistry & Biology*, Vol. 4, No. 4, pp. 297-307 (April 1997)
		Kodadek, T., "Development of Protein-Detecting Microarrays and Related Devices," *TRENDS in Biochemical Sciences*, Vol. 27, No. 6, pp. 295-300 (June 2002)
		Kodadek, T., "Development of protein-detecting microarrays and related devices", Trends in Biochemical Sciences, 27(6):295-300 (June 2002)
		Kodadek, T., "Protein microarrays: prospects and problems", Chemistry & Biology, 8:105-115 (2001)
		Lam, K. et al., "The 'One-Bead-One Compound' Combinatorial Library Method," *Chemical Reviews*, Vol. 97, No. 2, pp. 411-448 (1997)
		Lee, D. et al., "Pairwise Use of Complexity-Generating Reactions in Diversity-Oriented Organic Synthesis," *Organic Letters*, Vol. 2, No. 5, pp. 709-712 (2000)
		Lehn, J et al., "Dynamic Combinatorial Chemistry," *Science*, Vol. 291, pp. 2331-2332 (March 23, 2001)
		Li, S. et al., "Artificial Receptor-Facilitated Solid-Phase Microextraction of Barbiturates," *Anal. Chem.*, Vol. 71, No. 11, pp. 2146-2151 (June 1, 1999)
		MacBeath, G. et al., "Printing Proteins as Microarrays for High-Throughput Function Determination," *Science*, Vol. 289, pp. 1760-1763 (September 8, 2000)
		MacBeath, G. et al., "Printing Small Molecules as Microarrays and Detecting Protein - Ligand Interactions en Masse," *J. Am. Chem. Soc.*, Vol. 121, No. 34, pp. 7967-7968 (1999)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 14095.1USC6	Application Number: NEW FILING
	Applicant: CARLSON	
	Filing Date: FILED HEREWITH	Group Art Unit: 1645

		Maly, D. et al., "Combinatorial Target-Guided Ligand Assembly: Identification of Potent Subtype-Selective c-Src Inhibitors," *PNAS*, Vol. 97, No. 6, pp. 2419-2424 (March 14, 2000)
		McDonald, D. et al., "Application of Free Energy Perturbation Calculations to the Enantioselective Binding of Peptides to C_3-Symmetric Synthetic Receptors," *J. Am. Chem. Soc.*, Vol. 118, No. 8, pp. 2073-2077 (1996)
		Moore, J. et al., "'Masterpiece' Copolymer Sequences by Targeted Equilibruim-Shifting," *Organic Letters*, Vol. 2, No. 7, pp. 915-918 (2000)
		Mosbach, K. et al., "Generation of New Enzyme Inhibitors Using Imprinted Binding Sites: The Anti-Idiotypic Approach, a Step Toward the Next Generation of Molecular Imprinting," *J. Am. Chem. Soc.*, Vol. 123, No. 49, pp. 12420-12421 (2001)
		Ogoshi, H. et al., "Novel Approaches to Molecular Recognition Using Porphyrins," *Current Opinion in Chemical Biology*, Vol. 3, pp. 736-739 (1999)
		Olivos, H. et al., "Microwave-Assisted Solid-Phase Synthesis of Peptoids", Organic Letters, 4(23):4057-4059 (2002)
		Olivos, H. et al., "Quantum Dots as a Visual Aid for Screening Bead-Bound Combinatorial Libraries", Center for Biomedical inventions and the Departments of Internal Medicine and Molecular Biology, University of Texas Southwestern Medical Center, Dallas, Texas
		Opatz, T. et al., "A Selectively Deprotectable Triazacyclophane Scaffold for the Construction of Artificial Receptors," *Organic Letters*, Vol. 3, No. 22, pp. 3499-3502 (2001)
		Oprea, T. et al., "Chemography: The Art of Navigating in Chemical Space," *J. Comb. Chem.*, Vol. 3, No. 2, pp. 157-166 (2001)
		Park, H. et al., "Modulation of Protein-Protein Interactions by Synthetic Receptors: Design of Molecules that Disrupt Serine Protease-Proteinaceous Inhibitor Interaction," *PNAS*, Vol. 99, No. 8, pp. 5105-5109 (April 16, 2002)
		Park, H. et al., "Protein Surface Recognition by Synthetic Receptors: A Route to Novel Submicromolar Inhibitors for α-Chymotrypsin," *J. Am. Chem. Soc.*, Vol. 121, No. 1, pp. 8-13 (1999)
		Pattarawarapan, M. et al., "A Linker Scaffold to Present Dimers of Pharmacophores Prepared by Solid-Phase Syntheses," *Angew. Chem. Int. Ed.*, Vol. 39, No. 23, pp. 4299-4301 (2000)
		Peczuh, M. et al., "Peptide and Protein Recognition by Designed Molecules," *Chem. Rev.*, Vol. 100, No. 7, pp. 2479-2494 (2000)
		Pirrung, M., "Spatially Addressable Combinatorial Libraries," *Chemical Reviews*, Vol. 97, No. 2, pp. 473-488 (1997)
		Quaglia, M. et al., "Target Analogue Imprinted Polymers with Affinity for Folic Acid and Related Compounds," *J. Am. Chem. Soc.*, Vol. 123, No. 10, pp. 2146-2154 (2001)
		Ramström, O. et al., "Synthesis and Catalysis by Molecularly Imprinted Materials," *Current Opinion in Chemical Biology*, Vol. 3, pp. 759-764 (1999)
		Shao, Y. et al., "Sequence-Selective Receptors of Peptides, A Simple Molecular Design for Construction of Large Combinatorial Libraries of Receptors," *J. Org. Chem.* Vol. 61, No.18, pp. 6086-6087 (1996)
		Shao, Y. et al., "Sequence-Selective Receptors of Peptides. A Simple Molecular Design for Construction of Large Combinatorial Libraries of Receptors", J. Org. Chem., 61:6086-6087 (1996)
		Shellenberger, K. et al., "Effect of Molecular Scale Roughness of Glass Beads on Colloidal and Bacterial Deposition," *Environ. Sci. Technol.*, Vol. 36, No. 2, pp. 184-189 (2002)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 14095.1USC6	Application Number: NEW FILING
	Applicant: CARLSON	
	Filing Date: FILED HEREWITH	Group Art Unit: 1645

		Shinoda, S. et al., "Ester-Armed Cyclens Having Quadruplicated Helical Geometry: Remarkably Stable and Selective Encapsulation of Na^+ Ion," *J. Org. Chem.*, Vol. 66, No. 18, pp. 6104-6108 (2001)
		Sternson, S. et al., "Split-Pool Synthesis of 1,3-Dioxanes Leading to Arrayed Stock Solutions of Single Compounds Sufficient for Multiple Phenotypic and Protein-Binding Assays," *J. Am. Chem. Soc.*, Vol. 123, No. 8, pp. 1740-1747 (2001)
		Wang, Y. et al., "Identification of Chiral Selectors from a 200-Member Parallel Combinatorial Library," *Anal. Chem.*, Vol. 72, No. 21, pp. 5459-5465 (November 1, 2000)
		Way, J., "Covalent Modification as a Strategy to Block Protein-Protein Interactions with Small-Molecule Drugs," *Current Opinion in Chemical Biology*, Vol. 4, pp. 40-46 (2000)
		Winssinger, N. et al., "From Split-Pool Libraries to Spatially Addressable Microarrays and its Application to Functional Proteomic Profiling," *Angew. Chem. Int. Ed.*, Vol. 40, No. 17, pp. 3152-3155 (2001)
		Xu, R. et al., "Combinatorial Library Approach for the Identification of Synthetic Receptors Targeting Vancomycin-Resistant Bacteria," *J. Am. Chem. Soc.*, Vol. 121, No. 20, pp. 4898-4899 (1999)
		Yan, B. et al., "Crucial Factors Regulating Site Interactions in Resin Supports Determined by Single Bead IR," *J. Org. Chem.*, Vol. 63, No. 1, pp. 55-58 (1998)
		Zhu, H. et al., "Protein Arrays and Microarrays," *Current Opinion in Chemical Biology*, Vol. 5, pp. 40-45 (2001)
		Zhuravlev, N. et al., "Surface Coverages of Bonded-Phase Ligands on Silica: A Computational Study," *Anal. Chem.*, Vol. 73, No. 16, pp. 4006-4011 (August 15, 2001)
		Zimmerman, S. et al., "Model Systems," *Current Opinion in Chemical Biology*, Vol. 3, pp. 711-713 (1999)

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.